

TOP SECRET

17 422

P 021654Z
FM NPICOUT 66049
25X1
20 Oct 68AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN
ELOCUPZEM
TOP SECRET TTTT

ITE NPIC 4696

SSO SAC ALSO FOR 544 ARTW.

SUBJECT: CAMERA INFORMATION FOR MISSION 1048-1
1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS,
A STELLAR CAMERA, AND AN INDEX CAMERA.

2. CAMERA DATA

A. MAIN UNITS

FOCAL LENGTHS (MM) FORWARD AFT STAR HOR PORT HOR
609.602 609.602 FWD 54.670 FWD 54.930
AFT 55.000 AFT 54.650

	23A	21	25	25
FILTER (WRATTEN NR.)	23A	21	25	25
APERTURE	F3.5	F3.5	F8.0	F6.3
SLIT WIDTH (IN)	.200	.150	NA	NA
EXPOSURE (SEC)	1/100	1/100	NA	NA
FILM	3404	3404	3404	3404
RESOLUTION (L/MM)	192	199	NA	NA
CAMERA NUMBER	222	223	NA	NA

B. S/I UNITS

FOCAL LENGTH (MM) PART 1 PART 2
84.0114 84.0456

	NONE	21
FILTER (WRATTEN NR)	NONE	21
APERTURE	F 1.8	F 4.5
EXPOSURE (SEC)	2.0	1/500
FILM	3401	3400
RESOLUTION (L/MM)	NA	87
	NA	80

UNIT NUMBER PART 1 PART 2
D 121/155/160 D 116/147/136

3. LENS DISTORTION (PIN CUSHION) MM

	3	2	1	0	359	358	357
A. MAIN UNITS	3	2	1	0	359	358	357
FWD UNIT	.002	.001	0	0	0	.002	.002
AFT UNIT	.003	.002	0	0	0	.001	.002

B. HORIZON CAMERA (MM)

	PORT	STAR	PORT	STAR
(RADIAL) 10 DEGREES	.020	.010	.020	.020
20 DEGREES	.070	.050	.060	.060

DISTRIBUTION		
CY	OFFICE	PI
1	FILE	
2	CABLE SEC.	
	PP&B/RD	25X1
	SECUR.	
3,4	TSSG/77	25X1
	PSG/OC	
	RRD	
	REPRO	
	AID	
	IES	
	PROD	
	SCEN	
	WEST	
	EAST	
	M&S	
	PGM	
	IAS	
	DIA-XXA	
	SPAD	
	DIA-AP	
		25X1

ADVANCE BY
SANITIZED
WITH TEXT

25X1

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(TANGENTIAL) MAX VECTOR .016 .020 .030 .020

4. CAMERA ANGLES DEG. MIN.

A. ANGLE BETWEEN PAN CAMERAS 29 45.15

B. DEPRESSION ANGLE BETWEEN FWD STAR 14 31. 0

HORIZON AND PAN CAMERAS FWD PORT 14 43. 7

AFT STAR 15 57. 6

AFT PORT 15 22. 0

C. ANGLE BETWEEN STELLAR AND PART 1 89 57. 3

INDEX CAMERAS PART 2 89 59. 3

5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA (CYCLE RATE (CPS), GROUND ANGULAR VELOCITY (GAV), AND PASSES WHERE USED).

NO.	REF. LEVEL	CPS.	GAV.	NO.	AMPL. LEVEL	GAV.	PASSES
6	.3488	.0315	3	.1109	.0100	1D	
7	.3348	.0302	4	.0981	.0088	6D THRU 9D	
6	.3488	.0315	5	.0858	.0077	16D THRU 55D	
7	.3348	.0302	3	.1109	.0100	56D THRU 134D	

7. PROGRAM TIME DATA
CAMERA ON TIME

PASS	DAY	HR	MIN	SEC	PROGRAM ON TIME UP RAMP	SEC	PROGRAM DURATION
1D	18	23	01	08	1347	38	
6D 1	19	06	27	17	1088	317	
6D 2	19	06	34	24	1515	121	
8D 1	19	09	30	56	1283	43	
8D 2	19	09	34	53	1520	56	
9AE	19	10	40	59	73	47	
9D 1	19	11	04	42	1496	25	
9D 2	19	11	06	56	1630	114	
16D	19	21	38	00	1557	26	
20D	20	03	36	13	1404	61	
21D 1	20	05	00	11	1033	46	
21D 2	20	05	06	00	1382	69	
21D 3	20	05	08	20	1522	64	
22D	20	06	38	22	1512	79	
23D	20	06	38	22	1403	201	
24D	20	08	06	43	1415	199	
24D	20	09	37	07	1681	112	
25D	20	11	11	44	1175	31	
36D	21	03	35	04	1149	108	
38D	21	06	34	56	1505	153	
39D	21	08	11	00	1342	52	
40D	21	09	38	26	1732	55	
41D	21	11	15	06	1998	85	
42D	21	12	49	39	1774	55	
48D	21	21	45	46	1219	34	
52D 1	22	03	37	01	1530	111	
52D 2	22	03	42	12	1671	293	
53D	22	05	14	40			

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54D 1	22	06	41	13	1456	46
54D 2	22	06	43	38	1602	192
55D 1	22	08	11	02	1441	44
55D 2	22	08	13	04	1563	102
56D 1	22	09	37	56	124	72
56D 2	22	09	45	11	1682	72
61D 1	22	17	30	18	2452	54
61D 2	22	17	32	05	2559	53
63D	22	20	18	45	1728	94
68D	23	03	45	49	1471	124
69D	23	05	20	05	1713	266
70D	23	06	49	41	1673	45
71D	23	08	17	13	1511	166
73D	23	11	20	23	1670	47
84D 1	24	03	47	32	1346	121
84D 2	24	03	51	57	1610	108
85D	24	05	26	58	1899	89
86D	24	06	53	43	1691	200
87D 1	24	08	21	41	1557	54
87D 2	24	08	23	25	1660	31
87D 3	24	08	25	00	1755	26
88D 1	24	09	53	53	1675	93
88D 2	24	09	55	54	1796	133
88D 3	24	10	07	13	2475	27
89D 1	24	11	31	41	2131	37
89D 2	24	11	41	13	2703	34
95D	24	20	27	56	1831	44
100D 1	25	03	55	16	1615	36
100D 2	25	03	57	36	1756	86
101D 1	25	05	25	22	1610	106
101D 2	25	05	28	54	1822	107
102D	25	06	55	43	1619	71
103D	25	08	25	34	1600	145
104D	25	09	59	58	1852	92
105D	25	11	27	51	1715	57
114D	26	00	53	53	1385	176
116D	26	04	01	14	1807	93
117D 1	26	05	32	43	1888	64
117D 2	26	05	35	55	2080	63
118D 1	26	06	59	03	1659	88
118D 2	26	07	01	16	1791	232
119D	26	08	29	58	1706	127
120D	26	10	03	27	1907	124
130D	27	00	59	13	1572	60
132D	27	04	04	25	1869	84
133D	27	05	33	45	1821	90
134D 1	27	07	02	10	1674	173
134D 2	27	07	06	30	1934	73

NOTE: ABOVE DATA APPLIES TO FWD UNIT ONLY. ADD 12 SECONDS TO OBTAIN START TIMES OF AFT UNIT.

8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
8	97981.623	32817.1532	-----
16	142965.978	77801.5054	.003
24	184618.158	33053.6829	.002
32	229583.467	78018.9893	.002
40	271222.878	33258.3981	.002
48	316181.059	78216.5769	.002

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56	357793.330	33428.8460	.002
63	397441.435	73076.9493	.002
72	444499.746	33735.2585	.002
79	484062.355	73297.8661	.001
88	531187.175	34022.6846	.002
95	33847.433	73553.8535	.000
104	80959.616	34266.0354	.001
111	120489.882	73796.3006	.001
119	162142.899	29049.3169	.001
127	207085.825	73992.2423	.001
135	248725.622	29232.0389	.000

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS

GP-1

T O P S E C R E T

END OF MESSAGE